

THE
GRYPHON

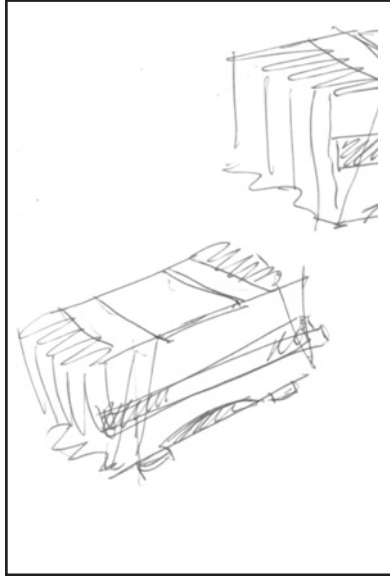


Diablo

Owner's Manual

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Introduction

Welcome to the global family of proud owners of fine audio components from Gryphon Audio Designs of Denmark. Your new Gryphon unit has been painstakingly designed to re-create the sound of live music taking place in its original recorded space. Every Gryphon product is designed to cater to the needs of the most discerning music enthusiast with sumptuous styling and superb user-friendliness which elevate it above the mundane world of conventional audio components.

As audiophiles, the members of the Gryphon design team are constantly reminded to keep their priorities straight. We are not involved in “hi-fi” for its own sake, but strictly as a means to an end, in the service of our lifelong love of the live music experience in all its sonic and emotional glory.

Our higher goal is to bring to the listener a “You-Are-There” sensation. In taking up this challenge, the Gryphon designers go back to basics to analyze the essential nature of the live music experience. For us, an awareness of soundstaging, ambience

and concert hall dimensions are necessary components. Dynamics and an unambiguous sense of instrument location even in the loudest passages are also high priorities. To achieve these objectives, Gryphon products offer exceptional speed and agility along with seamless coherence in the time domain.

Since 1985, Gryphon Audio Designs has quietly gone about the business of creating fine home audio components. We know that you will appreciate and enjoy the benefits of our accumulated experience and share our abiding passion for music.



The Gryphon

In Greek mythology: A fabled creature, half-lion and half-eagle, combining the power of the “King of Beasts” with the grace of the “King of Birds”. The guardian of the source of gold and protector of the Dionysian cup of infinite wealth.

In the real world: An acclaimed Danish audio engineering company employing cutting edge technology and common sense in the pursuit of the purest musical experience. We feel that the gryphon is an appropriate symbol for our high sonic goals.



Flemming E. Rasmussen

The Man

Gryphon Audio Designs is the brainchild of Flemming E. Rasmussen and the fulfillment of a lifelong dream to allow the purest essence of the live music experience to be recreated in the home environment.

Rasmussen holds a degree in painting and graphic arts from the Aarhus Art Academy, Denmark. During his studies, Rasmussen developed close relationships with the local music community and designed many LP covers and concert posters. After graduation, he taught photography and painting and designed textiles, before founding 2R Marketing, which quickly became Denmark's leading High End audio import company.

Gryphon Audio Designs was founded in 1985 as an offshoot of 2R Marketing. The first product, the now legendary Gryphon Head Amp, grew from a one-off spare time project developed only for the designers' own home systems. Although the Gryphon project was initially strictly a hobby, not an actively pursued commercial venture, demand generated by reviews and word-of-mouth led to the formal establishment of Gryphon Audio Designs as a separate corporate entity.



The Gryphon Head Amp 1985

Following the immediate success of the Gryphon brand, all import business was phased out in 1993, so that Rasmussen could dedicate his efforts entirely to Gryphon.

Made In Denmark

Every product from Gryphon Audio Designs is designed and built in Denmark. This is much more than just a geographical fact. It is also a seal of approval, a stamp of quality. Living in a region with no natural resources (no oil, coal, precious metals, etc.), the Danes have learned to rely on their quick wits and skilled hands. Innovative technology, beautiful craftsmanship, pride in one's craft and a keen eye for attractive design are some of the long-standing Danish traditions which are distilled to their finest essence in every unit that bears the Gryphon name.

Musical Objectives

While scientific method and sophisticated technology play an important role in our electronics design work, at Gryphon we never lose sight of the fact that the keen ears of an experienced listener are the most crucial "calibration tools." Therefore, every

Gryphon product exists for one simple purpose: to bring the user closer in the never-ending quest for a more natural and convincing musical illusion.

Every Gryphon design has been built to cruise effortlessly through even the most demanding musical passages, regardless of volume level, with a musical presentation defined by supreme articulation and immediacy, subtle dynamic shading and razor-sharp focus. Refinement and delicacy are combined with power and authority for a natural, involving listening experience.

The Gryphon Master Tape Collection

In the Gryphon listening rooms, we are fortunate to possess a unique library of more than 1,000 original master tapes of recordings made during the Golden Age of studio engineering from 1956-1976.

Unlike conventional commercial releases, our master tapes capture the dynamic contrasts and subtle inner harmonic structure of the musical event, forcing us

to work to a higher standard in our efforts to maintain the integrity of the original musical performance.

Design Principles

With state of the art technical equipment and some of the finest minds in the audio engineering field at our disposal, the Gryphon brand name continues to define the highest audiophile standards of subjective and technical performance.

The dual mono configuration radically eliminates any possibility of crosstalk or other interference between channels and provides infinite channel separation which contributes to the ability to create space, focus, depth and transparency.

Because the electrical power coming out of your wall fluctuates wildly in terms of voltage and distortion, Gryphon incorporates heavily regulated multi-stage power supplies that act as effective mains conditioning filters. Displays and control circuits are fed by a separate power supply to isolate any digital noise artifacts and effectively prevent them from contaminating the signal path.

While the printed circuit boards in more conventional audio prod-



Gryphon is located in beautiful tranquil surroundings.

ucts utilize conductor tracks a mere 35 um thick, Gryphon employs at least 70 um traces of the highest purity.

Beginning with our very first product, "The Head Amp" all Gryphon products have featured extremely wide frequency bandwidth, because the ability to reproduce ultra-sonic frequencies with no difficulty ensures linear phase across the audible frequency range.

The implementation of circuits with wideband frequency response is a painstaking endeavor in which the actual layout and ground pattern of the PC boards are crucial to the achievement of superior sonic performance with no loss of inherent stability.

Wideband frequency response ensures the high slew rate essential to the realistic handling of the ultra-fast transients which routinely occur in live music and is crucial in recreating the natural decay of musical instruments. Wide bandwidth also improves phase characteristics, for more correct soundstaging and imaging.

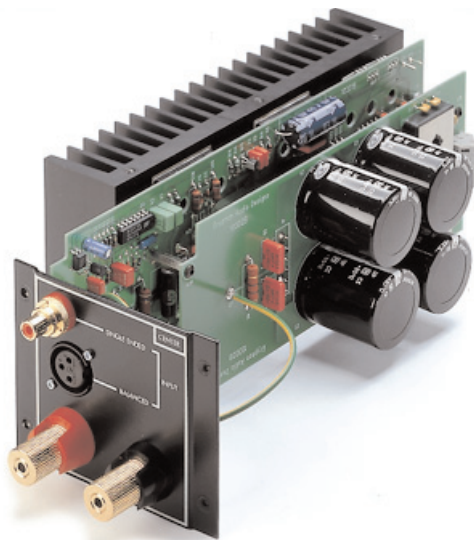
All Gryphon designs are realized with an absolute minimum of negative feedback, which when

present in large amounts can actually increase TIM distortion. All Gryphon preamplifiers are designed with zero negative feedback. Gryphon power amplifiers apply negative feedback judiciously for improved linearity and bandwidth.

Gryphon research into the detrimental effects of magnetically induced distorted (MID) has led to the elimination of magnetizable materials wherever possible. To eliminate the effects of stray magnetic fields, non-magnetic materials are employed throughout, with the unavoidable exception of the transformer shield box.

The mechanical design of the cabinet and assembly methods are all carefully calculated to ensure minimal resonance, either through the use of mechanically grounded high mass or decoupling. Vibration-sensitive components, capacitors in particular, are thus guaranteed a non-resonant environment.

The heavy, thick chassis offers a vibration-proof environment for the sensitive electronics inside and provides crucial shielding from a polluted world of low and high-frequency radio waves, power-line radiation and other



Typical Gryphon module

electrical interference. Meticulous attention to such issues makes a significant contribution to the relaxing, open and transparent Gryphon sound.

Unique, non-invasive protection circuitry offers reliable, fuss-free protection without compromising signal purity and signal path simplicity, with no conventional relays in the signal path to degrade or compress sound.

The ground path has been carefully laid out in order to achieve superior sonic performance with no loss of stability. Component layout has been designed to ensure the shortest conceivable signal path.

Exhaustive investigation underlies the selection of every component part and many original, proprietary components are custom-built exclusively for Gryphon. Because what is left out is just as important as what goes in, an absolute minimum of internal wiring is included.

By lavishing attention on each aspect of the circuit and fully understanding the purpose and behavior of every single part of the whole, our designers can optimize performance in each section, before moving on to the next step. This ensures simplici-

ty, a short signal path and a unity of purpose with a single, well-defined objective: musical purity.

In the interest of ultimate fidelity, tone controls, balance controls and other unnecessary components have been banished from the signal path.

Exterior Design

From the very beginning, every Gryphon product has offered stunning audio performance, sumptuous styling and superb user-friendliness, catering to the needs of the discerning audiophile who demands musicality, convenience and aesthetics, all without compromise.

In every Gryphon product, form follows function in a unique synthesis of aesthetics and practicality. Gryphon stands for sophisticated technology with a high standard of industrial finish that also incorporates the best of handcraftsmanship.

The peerless finish, build quality, ergonomics and pride of ownership that contribute to the totality of the Gryphon concept can only be fully understood and appreciated up close and in person.

Rasmussen's background in fine arts and industrial design gives every Gryphon product a distinctive, luxuriant finish which arises



Gryphon Audio Designs in the outskirts of the small town of Ry

organically out of the audio circuit design and the user interface for a truly unique integration of form and function.

Manufacture and Assembly

At our laboratories and manufacturing facilities in Denmark, we maintain full control over every aspect of development and production, and the members of our conscientious staff diligently follow each Gryphon model from initial concept to early prototype, through to final quality control.

Printed circuit boards are assembled by a supplier of precision military and medical equipment with strict standards of quality control and pre-inspection of components. Chassis parts are manufactured by a specialist chosen solely for the outstanding quality of workmanship. In every aspect of every Gryphon product, the same stringent standards of excellence apply.

Following a 48-hour burn-in, each product is tested again, before being subjected to Gryphon's custom-developed transport simulator which simulates the inevitable shaking that

a product will encounter in transit. The product is placed on top of a very large loudspeaker which plays a special CD with low frequencies which simulate the vibrations of an airplane. Each unit "travels" the equivalent of 40 round trips from Denmark to Australia before leaving the factory.

AC Voltage

Your Gryphon unit is especially made for the AC voltage of the country to which it has been shipped. If the voltage has been changed, the warranty is void and the product may be unsafe or malfunction.

Correct AC polarity contributes greatly to optimum performance. If you are not using a three-pin, non-reversible power plug, please experiment with the orientation of the plug for optimum performance.

Burn-In and Warm-Up

Your Gryphon unit has been thoroughly tested and burned in before shipping. Performance will continue to improve during the first 40 – 50 hours of normal use. After this period optimum performance will be reached

The master On/Off switch on the Diablo is placed on the underside of the unit near the front.

approximately 45 minutes after turn-on. With the exception of Class A power amplifiers, we recommend leaving your Gryphon components powered up at all times.

Placement

Care must be taken to position the Diablo only on a stable surface which can reliably support the weight of the amplifier. The amplifier's heat sinks have been carefully designed and placed to optimize heat dissipation for ideal cool operating conditions. In order for the heatsinks to operate effectively, there must be ample air circulation around the Diablo at all times.

Do not place the Diablo on or near any source of heat. Do not place any object directly on top of the Diablo. Do not place the Diablo in an enclosed space such as a cabinet, unless ample ventilation is provided.

Menu-activated functions

The Gryphon Diablo incorporates several functions which are accessed via a Menu system.

To access the Menu, press

Menu. MENU will appear in the display and the Diablo will mute its output. CONTINUE will blink in the display. To enter the Menu, press Monitor. If you do not wish to access the menu-controlled functions, press an Input button so that EXIT blinks in the display, then press Monitor to return to normal playback and to the normal display.

When you enter the Menu, NAME INPUT will appear in the display. Press Menu again to move through the menu-controlled functions in the following order:

Name Input - Change Max Level - Change Start Level - Brightness Control - Restore Settings - Dedicate input 3 to AV - Continue/Exit

At the end, you can either continue from the beginning of the list or exit the Menu. To return to the top of the list, press Monitor and NAME INPUT will appear in the display. To exit the Menu, press an Input button so that EXIT blinks in the display, then press Monitor to return to normal playback and to the normal display. Any settings which you have changed are automatically stored in memory.

Naming Inputs

You can assign a specific name to each input, either a pre-programmed standard name or a custom name of your choice of up to 8 characters. When NAME INPUT appears in the display, press Monitor. SELECT INPUT: 1 will appear in the display. To choose a different input for naming, press an Input button to move up or down through the five inputs. When the number of the input which you wish to name is displayed, press Monitor. CUSTOM will blink in the display. If you wish to create a custom name for the input, press Monitor and skip to section 1.a. below. If you wish to select a name from the standard list, press an Input button so that STANDARD blinks, then press Monitor and skip to section 1.b. below. Please note: If a name has previously been assigned to the input, that name will be deleted if you press Monitor while STANDARD is blinking.

1.a. If you have chosen custom naming, CUSTOM will appear in the first line of the display. The selected input number will appear in the second line, followed by a colon (:) and a cursor marking the first position in the 8-character name which you can create. If a custom name has

already been assigned to this input, it will be displayed. To select a character (letter, number, symbol, empty space or punctuation mark) for the first position, continuously press one of the Volume buttons until the desired character is displayed. Press Input Up to move to the next position, then use the Volume buttons to select the desired character. Repeat for each character in the name. If you make a mistake or change your mind, use the Input Down button to move back and change a previously selected character. When the name is complete, press Monitor. The name is now stored in memory and will be displayed each time you select that input. NAME INPUT will appear in the display. You can go back to step 1 above to name another input or press Menu to select the next menu-controlled function.

1.b. If you have chosen standard naming, SELECT STANDARD NAME will appear in the first line of the display. The selected input number and the first name in the standard list (CD) will appear in the second line. To select the name which you wish to assign to the input, press the volume buttons to move up or down through the standard name list in the following order:

CD – DVD – DSD – TUNER –
TAPE – PHONO – DAT – MINI-
DISC – AUX

When the name which you wish to assign to the input is displayed, press Monitor. The name is now stored in memory and will be displayed each time you select that input. NAME INPUT will appear in the display. You can go back to step 1 above to name another input or press Menu to select another menu-controlled function.

Setting Maximum Level

You can select and store in memory a maximum volume level (between 01 and 50) which cannot be exceeded, manually or by remote, until you re-set this function. This effectively protects your audio system from expensive accidents. When CHANGE MAX LEVEL appears in the display, press Monitor. MAX LEVEL: and the currently assigned maximum volume setting will appear in the display. To change this setting, press Volume Up or Down until the desired maximum volume level is displayed. Press Monitor. The selected maximum volume setting is now stored in memory. CHANGE MAX LEVEL will appear in the display. Press

Menu to select the next menu-controlled function.

Setting Start-Up Level

You can select and store in memory a default volume level (between 00 and 20) which will automatically be set by the amplifier each time you turn it on. When CHANGE START LEVEL appears in the display, press Monitor. START LEVEL: and the current default start level will appear in the display. To change this setting, press Volume Up or Down until the desired start level is displayed. Press Monitor. The selected start level is now stored in memory and will be set each time you turn on the amplifier. CHANGE START LEVEL will appear in the display. Press Menu to select the next menu-controlled function.

Setting Display Brightness

You can select and store in memory the desired level of brightness in the front-panel display. When BRIGHTNESS CONTROL appears in the display, press Monitor. BRIGHTNESS will appear in the first line of the display. 100% 75% 50% 25% OFF will appear in the second line. The 100% indicator will blink. Press an Input button

repeatedly until the desired level of brightness blinks. The display will immediately change to the selected brightness, unless you have selected OFF. If OFF is selected, the display will turn off after you exit the Menu. Press Monitor. The selected brightness level is now stored in memory. BRIGHTNESS CONTROL will appear in the display. Press Menu to select the next menu-controlled function.

NOTE: When the display is turned completely off, pressing any button on the front panel or on the remote will cause the display to turn on briefly so that you can see the current volume level and selected input. Press a second time to activate the desired function.

Restoring Default Settings

You can delete all of your custom Menu settings and return to the factory pre-set default settings. Doing so deletes all input names, sets Maximum Level at 50, sets Start Level at 00, sets Brightness at 100% and sets Input 3 as a normal audio input. When RESTORE SETTINGS appears in the display, press Monitor. RESTORE? appears in the first line of the display. NO and YES appear in the second

line. NO will blink. If you do NOT wish to delete your custom settings, press Monitor, while NO is blinking, then press Menu to select the next menu-controlled function. If you do wish to delete all your custom settings, press Input Up until YES blinks, then press Monitor. You have now deleted all your custom settings. The factory pre-set default settings are now in effect. RESTORE SETTINGS will appear in the display. Press Menu to select the next menu-controlled function.

Assigning Input 3 as a Dedicated AV Connection

You can use the power amplifier section of the Diablo and your normal stereo loudspeakers with a separate surround processor by connecting the left and right front channels from your surround processor to Input 3 of the Diablo and using the Menu to configure this input so that the signal bypasses all preamplifier stages in the Diablo. This allows you to enjoy the full performance of the Diablo for stereo and surround listening without placing any surround components in the stereo signal path.

CAUTION: When Input 3 is set up as a dedicated AV connection, the Diablo's volume control is automatically set at a fixed level. The signal from the surround processor goes to the Diablo power amplifier section and MUST be calibrated and attenuated by the surround processor.

When DEDICATE INP.3 TO AV appears in the display, press Menu to select the next menu-controlled function, if you do NOT wish to connect the left and right front channels from a surround processor to Input 3 of the Diablo. If you do wish to make a dedicated AV connection, press Monitor. WARNING! NO ATTENUATION will blink in the display for 5 seconds, after which you will be asked to confirm that you wish to configure Input 3 as a dedicated AV connection which bypasses the Diablo volume control. ARE YOU SURE? will appear in the first line of the display. NO and YES will appear in the second line. NO will blink.

If you do NOT wish to make a dedicated AV connection, press Monitor while NO is blinking, then press Menu to select the next menu-controlled function. If you do wish to make this connection, press Input Up so that YES blinks in the display. Press

Monitor. Input 3 is now configured as a dedicated connection which bypasses the Diablo volume control and should ONLY be used with a source which has its own volume control, such as a surround processor. NEVER connect a normal line-level source such as a tuner, CD player, etc. directly to this input, while it is configured in this manner. You can always restore Input 3 to normal operation via the Menu.

When you have configured Input 3, DEDICATE INP.3 TO AV will appear in the display. Press Menu to select the next menu-controlled function.

Exiting the Menu

When CONTINUE and EXIT appear in the display, you can either exit the Menu or return to the beginning of the list of menu-controlled functions.

To go to the top of the list, press Monitor while CONTINUE is blinking.

To exit the Menu, press an Input button so that EXIT blinks, then press Monitor to return to normal playback and to the normal display.

Subwoofer connection

This output allow you to connect a active subwoofer or a second poweramplifier.

Link

This is a connection allowing certain Gryphon models to exchange information.

Balanced Connections

All Gryphon products uses the AES standard for balanced connections.

1. Ground
2. Positive
3. Negative

We recommend the use of dedicated balanced cables. Avoid the use of adaptors as they degrade performance.

Diablo Volumen control.

A unique new volumencontrol was developed for the Diablo and this new priinciple will in future be found in all Gryphons top of the line products. It is not a digital devise but a discrete solution based on fixed resistors in a ultra short signal path involving a very smal number of relays selected for perfect function and sonic "invisible" qualities. This

technology can sometimes - dependign on the material played - make a very smal click-ing noise when used. This is not a sign that anything is wrong and is normal.

Choice of Cables

Because your Diablo integrated amplifier is a high-resolution Gryphon audio device, it will immediately reveal the characteristics and possible limitations of the other components in your system, as well as those of the interconnects and loudspeaker cables used to connect your system.

Wiring should never be utilized as "equalizers" to correct errors elsewhere in the system. Instead, any error should be corrected at the source, so that interconnects and loudspeaker cables can be selected solely on the basis of sonic neutrality. For this reason, we employ Gryphon's own range of interconnects and cables in every stage of the design of every Gryphon product.

Care/ Maintenance

Gryphon products are handcraft-ed by individuals who take great pride in the high level of fit and

finish which we achieve. To maintain your Gryphon components in pristine condition, please follow these simple instructions.

Metal surfaces may be cleaned with a damp cloth. Some product made for treatment of vinyl interiors in cars may be useful. Test the product on a non-visible surface, before using any fluids.

Acrylic surfaces should only be wiped with a very soft, dry cloth. Small scratches may be removed with fiberglass polish. Fingerprints may be removed with a damp cloth. Do NOT use spirits or paper tissue.

Warranty

The Gryphon Diablo is warranted against failures arising through faulty workmanship and materials for a period of 3 year from date of purchase. The warranty is not transferable.

This warranty is only valid in the country where the product was purchased.

All claims under this warranty must be made to the distributor in the buyer's country by returning the unit securely packed in the original box with all acces-

sories, postage/freight prepaid and insured. The unit will be repaired or replaced at no charge for parts and labor.

This warranty remains valid only if the serial number of the unit has not been defaced or removed and if repairs are performed only by authorized Gryphon dealers or distributors.

The warranty does not cover damage due to misuse, accident or neglect. This warranty is not valid if the operation voltage of the product has been changed.

The distributor or manufacturer, Gryphon Audio Designs, Denmark, retains the exclusive right to make such judgement on the basis of inspection.

The retailer, distributor or manufacturer of the Gryphon shall not be liable for consequential damage arising from the use, misuse or failure of this product, including injuries to persons or property.

To qualify, the enclosed warranty registration card must be filled out and returned to the manufacturer within 10 days of purchase.

SAFETY INSTRUCTIONS



Do not expose the unit to dripping water or moist.

Placement:

Do not place your Diablo on top of any heat producing products, such as power amplifiers or DACs. If you place the Diablo inside any Hi-Fi furniture or cabinets, there must be a clearance of a minimum of 10cm (4 inches) above the product and a minimum of 5cm (2 inches) along the sides. To allow a flow of cooling air the back of the cabinet must be open. If these guidelines are not observed, overheating may result.

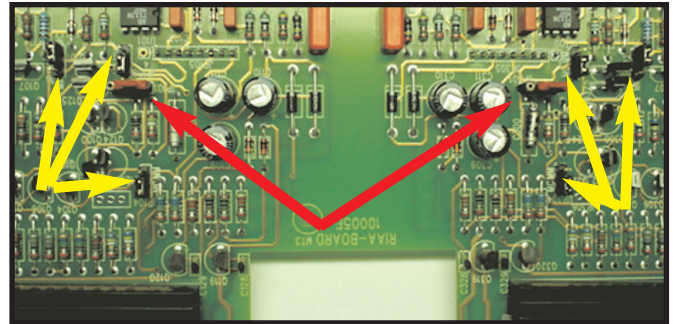
Mains Switch:

To place your Diablo into stand-by mode use the main switch. The switch is located in the bottom on the right side just beneath the acrylic front panel.



**USING THE
OPTIONAL
DIABLO /CALLISTO/
TABU/ PHONO MODULE.**

Gain:	Moving coil (MC)	:	64dB	
	Moving magnet (MM)	:	42dB	
Impedance:	Moving Coil (MC)		20 or 100 Ohm	
	Moving Magnet (MM)		47 kOhm/200pf.	
S/N ratio:	MC	Input 250mV 1kHz	:	>72dB
	MM	Input 2.5mV 1kHz	:	>84dB



Input impedance in MC mode

With the (red) jumper placed to the right side of the jumper sockets (JP101) and (JP301) the input impedance will be 100 Ohm in MC mode.

With the jumper placed to the left side of the jumper socket the input impedance will be 20 Ohm in MC mode.

Input impedance in MM mode

The input impedance in MM mode is 47kOhm/200pF.

Switching between MM and MC (yellow illustration)

The selection of MC or MM is made with jumpers JP100, JP102, JP104, JP300, JP302, and JP304.

NOTES

Serial

No.....

Date of purchase:

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